

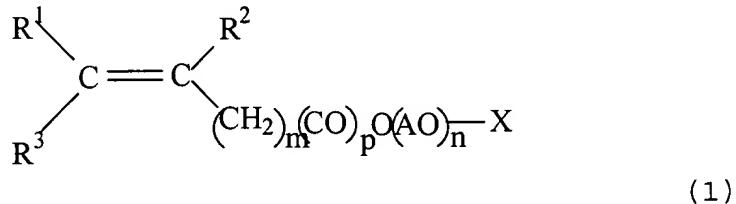
Appl. No. 09/994,651  
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October 8, 2003  
Reply to Office Action of July 8, 2003

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the present application.

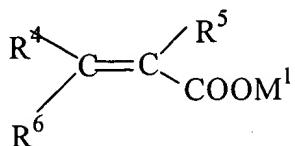
***Listing of Claims:***

1. (Currently Amended) A powdery dispersant for a hydraulic composition, which comprises said powdery dispersant comprising at least one copolymer, wherein said copolymer is made by obtainable by polymerizing at least one vinyl monomer (a) represented by the formula (1) :



wherein R<sup>1</sup> and R<sup>2</sup> represent a hydrogen atom or a methyl group, R<sup>3</sup> represents a hydrogen atom or -COO(AO)<sub>n</sub>X, m is a number of 0 to 2, p is a number of 0 or 1, AO represents a C<sub>2-4</sub> oxyalkylene group or an oxystyrene group, n is the average mole number of AO groups and is a number of 2 to 300, and X represents a hydrogen atom or a C<sub>1-18</sub> alkyl group;

with at least one vinyl monomer (b) represented by the formula (2) :



(2)

wherein  $\text{R}^4$ ,  $\text{R}^5$  and  $\text{R}^6$  are the same as or different from one another and each represent a hydrogen atom, a methyl group or  $(\text{CH}_2)_{m1}\text{COOM}^2$  in which wherein  $-(\text{CH}_2)_{m1}\text{COOM}^2$  may be is optionally combined with  $-\text{COOM}^1$  or another  $-(\text{CH}_2)_{m1}\text{COOM}^2$  to produce an anhydride, anhydride so that  $\text{M}^1$  and  $\text{M}^2$  of these groups not being are not present,  $\text{M}_1$  and  $\text{M}_2$   $\text{M}^1$  and  $\text{M}^2$  represent a hydrogen atom or a polyvalent metal, and  $m_1$  is a number of 0 to 2,

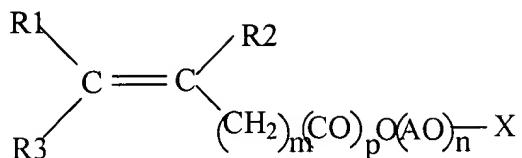
in which wherein the average mole number of  $\text{C}_{2-4}$  oxyalkylene groups or oxystyrene groups added to the dispersant molecule of said copolymer is 45 to 150, 150;

(a)/[(a) + (b)]  $\times$  100 ranges from 15 to 45 (mole%); and

at least part of the copolymer is a polyvalent metal salt.

2. (Original) The powdery dispersant according to claim 1, wherein (a)/[(a) + (b)]  $\times$  100 ranges from 20 to 35 mole%.

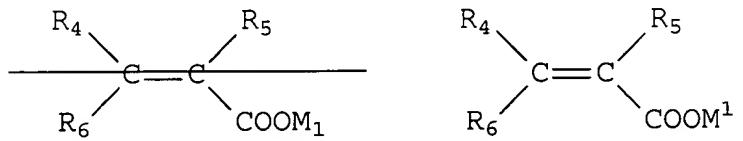
3. (Currently Amended) A powdery dispersant for a hydraulic compositions, which comprises said powdery dispersant comprising at least one copolymer, wherein said copolymer is made by obtained by polymerizing at least one vinyl monomer (a) represented by the formula (1):



(1)

wherein  $\text{R}^1$  and  $\text{R}^2$  represent a hydrogen atom or a methyl group,  $\text{R}^3$  represents a hydrogen atom or  $-\text{COO}(\text{AO})_n\text{X}$ ,  $m$  is a number of 0 to 2,  $p$  is a number of 0 or 1,  $\text{AO}$  represents a  $\text{C}_{2-4}$  oxyalkylene group or an oxystyrene group,  $n$  is the average mole number of added  $\text{AO}$  groups and is a number of 2 to 300, and  $\text{X}$  represents a hydrogen atom or a  $\text{C}_{1-18}$  alkyl group;

with at least one vinyl monomer (b) represented by the formula (2) :



(2)

wherein  $\text{R}^4$ ,  $\text{R}^5$  and  $\text{R}^6$  are the same as or different from one another and each represent a hydrogen atom, a methyl group or  $-(\text{CH}_2)_{m_1}\text{COOM}^2$  in which wherein  $-(\text{CH}_2)_{m_1}\text{COOM}^2$  may be is optionally combined with  $-\text{COOM}^1$  or another  $-(\text{CH}_2)_{m_1}\text{COOM}^2$  to produce an anhydride, anhydride so that  $\text{M}^1$  and  $\text{M}^2$  of these groups not being are not present,  $\text{M}_1$  and  $\text{M}_2$   $\text{M}^1$  and  $\text{M}^2$  represent a hydrogen atom or a monovalent metal, and  $m_1$  is a number of 0 to 2,

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~~in which wherein the average mole number of C<sub>2-4</sub> oxyalkylene groups or oxystyrene groups added to the dispersant molecule of said copolymer is 50 to 150, 70 to 115;~~

(a) / [(a) + (b)] × 100 ranges from 15 to 45 (mole%); and

at least part of the copolymers is a monovalent metal salt.

4. (Original) The powdery dispersant according to claim 3, wherein

(a) / [(a) + (b)] × 100 ranges from 20 to 45 mole%.

5. (Currently Amended) The powdery dispersant according to claim 1, or 3, wherein the average mole number of C<sub>2-4</sub> oxyalkylene groups or oxystyrene groups added of said copolymer is 60 to 130.

6. (Currently Amended) The powdery dispersant according to claim 1, or 3, wherein the average mole number of C<sub>2-4</sub> oxyalkylene groups or oxystyrene groups added of said copolymer is 60 to 115.

7. (Original) The powdery dispersant according to claim 1, wherein all the copolymers are polyvalent metal salts in part.

8. (Original) The powdery dispersant according to claim 1 or 3, which comprises a copolymer obtained from starting monomers containing 98 to 100 % by weight of the monomers (a) and (b).

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9. (Original) The powdery dispersant according to claim 1 or 3, which comprises 50 to 100 % by weight of dispersant particles whose diameter is 500  $\mu\text{m}$  or less.

*a1*  
10. (Withdrawn) A hydraulic composition comprising the powdery dispersant described in claim 1 or 3 and a hydraulic composition.

11. (Canceled)

12. (Withdrawn) A method of dispersing a hydraulic composition by the powdery dispersant described in claim 1 or 3.

13. (New) The powdery dispersant for a hydraulic composition of claim 3, wherein the average mole number of the  $\text{C}_{2-4}$  oxyalkylene groups or oxystyrene groups of said copolymer is 70 to 100.

14. (New) The powdery dispersant for a hydraulic composition of claim 1, wherein AO of said vinyl monomer (a) is an oxystyrene group.

15. (New) The powdery dispersant for a hydraulic composition of claim 1, wherein said at least one vinyl monomer (b) is selected from the group consisting of (meth)acrylic acid, a salt thereof and maleic anhydride.

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16. (New) The powdery dispersant for a hydraulic composition of claim 1, wherein said polyvalent metal salt is an alkaline earth metal salt.

17. (New) The powdery dispersant for a hydraulic composition of claim 16, wherein the vinyl monomer (b) is an alkaline earth metal salt of (meth)acrylic acid.

18. (New) The powdery dispersant for a hydraulic composition of claim 3, wherein said at least one vinyl monomer (b) is selected from the group consisting of (meth)acrylic acid, a salt thereof and maleic anhydride.

19. (New) The powdery dispersant for a hydraulic composition of claim 3, wherein said monovalent metal salt is an alkali metal salt.

20. (New) The powdery dispersant for a hydraulic composition of claim 18, wherein said monovalent metal salt is an alkali metal salt.